REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

In response to the rejection of claim 39 under 35 U.S.C. §112, second para-graph, the phrase "aggregate offered traffic rate" has been deleted, thus mooting this ground of rejection.

If there are any remaining formality-based issues, it is respectfully requested that the undersigned be telephoned for prompt resolution.

The new ground of rejection for all pending claims 39, 42-44, 48-52 and 54-69 under 35 U.S.C. §103 as allegedly being made "obvious" based on Smith '224 in view of Ginzboorg '077 and Margulis '449 is respectfully traversed.

Initially, it is noted that prior to the above amendment, independent claims 39, 57 and 70 each required the initial local gap interval (Δt_0) to be applied without waiting for traffic to be received at the network access point in question. These independent claims have been amended above so as to further emphasize this particular feature (i.e., requiring the initial local gap interval to be applied before another call arrives at its respective network access point or gateway). It will be noted that some other details of these independent claims have now been omitted so as to better focus upon this particular feature in the relevant context.

At page 7 of the last office action, the Examiner has already recognized that the combination of Smith/Ginzboorg does not, *inter alia*, disclose imposing the initial local gap interval at each of plurality network access points without waiting for traffic to be received at that network access point.

To supply this admitted deficiency of Smith/Ginzboorg, the Examiner relies upon Margulis at 5:47-55 and/or 6:17-24. However, these passages in Margulis simply relate to immediate broadcasting of a gap control message to all switches on the network. There is no teaching or suggestion here of any immediate imposition or application of a new gap time before the next call is received. Indeed, the passage at 6:17-24 explicitly teaches that each switch subsequently loads gap times to a timer. There is no suggestion here that a new gap time should be immediately applied before the next call is received.

The Examiner asserts, in effect (e.g., see last paragraph on page 8 of the last office action), that because Margulis teaches randomizing an initial gap interval to avoid synchronized access attempts at the end of the gapping period, it would have been obvious to apply an initial gap interval without waiting for a call to trigger this.

However, Margulis considers only the problem of avoiding synchronized access attempts at the end of the gapping period. Nothing in Margulis, or the other cited prior art, considers how to avoid synchronized access at the beginning, or how to rapidly

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replace a long gapping period at a switch with a shorter gapping period to maintain the optimum through-put by each switch.

The applicants' invention uses a central controller to determine that an overload condition exists within a network, and then to moderate how the network reacts by generating central call gapping control instructions – which call gapping interval is then modified by each access point according to its own local gapping conditions. This enables the network as a whole to be more responsive during periods of time when a mass calling event starts and ends.

According to the cited prior art, all call gapping is triggered by receiving a first call, which is forwarded ("or passed"). However, this first call is thus the first call AFTER the overload condition has been detected, and so will prolong a repeat overload condition at the central network access controller. Whenever an overload condition is detected at the network controller, each receiving switch imposes a new local call gap and random gap interval – but which then waits for the next first call which is allowed through before triggering the new call gap interval.

In very high rate of call onset conditions, each switch may receive calls at a sufficiently high rate for lots of calls to be passed at the same time before the first gap interval is triggered. When calls are received at such a high rate, the result is that the overload condition recurs at least once and/or is prolonged.

The claimed invention addresses the problem of system responsiveness in two ways with the same feature. Firstly, by providing a new gap interval immediately, it prevents the next first "call" from being allowed to pass through each access point to the network controller before each access point applies its new local call gapping. Instead, each access point imposes an immediate initial call gap interval which randomizes the subsequent, themselves random, local call gap intervals.

This is particularly important as a mass calling event subsides, when the call gap interval is shortened, because if the previous gap interval is very long, and has to expire before the new gap interval is applied, calls are needlessly gapped instead of being allowed through.

None of the cited prior art seeks to address this problem, and it is not obvious from any combination of Smith, Ginzboorg or Margulis that such a problem even can be addressed in the manner of the claimed invention.

The applicants' invention, unlike the cited prior art, provides an overload control method which responds quickly not just to the detection of overload events, but also ensures that the system returns to normal operation as quickly as possible. Simply applying a variable initial gap interval is not sufficient if the start of the gap interval must be triggered by the next call.

The Examiner is respectfully referred to discussion of this problem in the specification. For example, see page 4, lines 27-29, which describe how "if a gap interval update is applied to an access point which is already being gapped, the delay waiting for an existing gap interval timer to expire before the updated gap can have an effect on the admitted rate." Also see page 13, line 34 to page 14, line 3.

Accordingly, as a mass calling event ceases, the claimed invention provides an adjusted gap interval to be updated on a more rapid basis. Moreover, in the cited prior art, each access point will always admit one next call to trigger the new gap interval and this means the network will always have the potential to be overloaded at least once in very high calling events.

Given such fundamental deficiencies of the cited prior art with respect to each of the independent claims as already discussed, it is not necessary at this time to discuss in detail additional deficiencies of this cited prior art with respect to other aspects of the rejected claims.
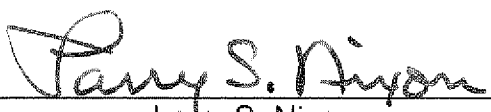
The Examiner's attention is also drawn to new dependent claims 70-72 which depend, respectively, from independent claims 1, 57 and 67. As will be noted, these claims require that the new initial local gap interval replace an existing gap interval applied by that respective access point before an existing time interval timer expires. Accordingly, these claims are believed to be still further distinguished from any teaching or suggestion of the cited prior art.

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Accordingly, this entire application is now believed to be in allowable condition,

and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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